

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 1-4 and 6-10 are currently being amended. Claim 5 is currently being canceled.

This amendment changes and deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-4 and 6-12 remain pending in this application.

Allowable Subject Matter

Applicants appreciate the indication of the allowance of claims 6 and 7.

Claim Rejections - 35 U.S.C. § 102

On page 2 of the Office Action, claims 1-3, 5, and 8-12 were rejected under 35 U.S.C. § 102(e) as being anticipated by Nakamori et al. (U.S. Patent No. 6,799,109).

A. Claim 1

Claim 1, as amended, recites that a motor torque control system for a vehicle equipped with a motor comprises a vehicle speed sensor that detects a vehicle speed, an accelerator opening detector that detects an opening of an accelerator of the vehicle, a **brake depression detector that detects a brake depression quantity indicative of a depression state of a brake of the vehicle**, and a control unit coupled to the vehicle speed sensor, the accelerator opening detector, and the brake depression detector.

Claim 1 further recites that the control unit is arranged to bring a motor torque of the motor to zero (i) when the vehicle speed is lower than a predetermined speed, (ii) when the accelerator opening is substantially zero, and (iii) **when a differential of the brake depression quantity is positive**, and to generate motor torque according to the brake depression quantity **when the differential of the brake depression quantity is negative**.

In accordance with claim 1, and as described in paragraphs [0027] to [0029] of the specification, the control unit calculates the differential of the brake depression quantity as being positive (i.e., an increase of brake depression quantity over time) or negative (i.e., a decrease of brake depression quantity over time).

Nakamori discloses that a brake sensor 22 detects whether the brake is released (OFF) or depressed (ON). In contrast to claim 1, Nakamori does not disclose or suggest bringing a motor torque of the motor to zero when a differential of the brake depression quantity is positive. Rather, Nakamori merely discloses detecting whether a brake is ON or OFF, but does not disclose detecting the differential of the brake depression quantity. Indeed, the differential of the brake depression quantity can be positive or negative while the brake is depressed. With only a binary detection of the state of the brake as being either depressed or released, the brake sensor 22 is simply incapable of detecting the differential of the brake depression quantity.

Since Nakamori fails to disclose or suggest detecting the differential of the brake depression quantity, Nakamori necessarily fails to disclose or suggest generating motor torque according to the brake depression quantity when the differential of the brake depression quantity is negative. As mentioned previously, the brake sensor 22 merely provides a binary detection of the state of the brake as ON or OFF. Accordingly, the system of Nakamori is incapable of generating motor torque according to the brake depression quantity when the differential of the brake depression quantity is negative.

Further, Nakamori fails to disclose or suggest a brake depression detector that detects a brake depression quantity indicative of a depression state of a brake of the vehicle, as recited in claim 1. Although Nakamori has a brake sensor 22 to detect whether the brake is depressed or not, Nakamori fails to disclose or suggest detecting a brake depression quantity, i.e., the amount that the brake is depressed. In other words, simply indicating that the brake is depressed in no way suggests detecting how much the brake is depressed.

Therefore, for all of these reasons, claim 1 is patentably distinguishable from Nakamori.

B. Claims 2-4 and 8-10

Claims 2-4 are patentably distinguishable from Nakamori by virtue of their dependence from claim 1, as well as their additional recitations. Claims 8, 9 and 10 are patentably distinguishable from Nakamori for reasons analogous to claim 1.

C. Claims 11-12

Claim 11 recites that a motor torque control system for a vehicle equipped with a motor comprises a vehicle speed sensor adapted to sense a phenomenon indicative of vehicle speed, an accelerator sensor adapted to sense a phenomenon indicative of a command to accelerate the vehicle, a braking force sensor adapted to sense a phenomenon indicative of at least one of a command increasing magnitude and a command decreasing magnitude of a brake force of the vehicle, and a control unit in communication with the vehicle speed sensor, the accelerator sensor, and the braking force sensor,

Claim 11 further recites that the control unit is adapted to control the motor to bring motor torque of the motor to zero when (i) the vehicle speed sensed is lower than a predetermined speed, (ii) the phenomenon indicative of a command to accelerate the vehicle has not been sensed, and (iii) the command increasing the magnitude of the brake force has been sensed, and wherein the control unit is adapted to control the motor to output motor torque of the motor when a command decreasing the magnitude of the brake force has been sensed.

In accordance with claims 11, while the brake is depressed, the magnitude of the brake force may be increased or decreased. For example, if the brake is depressed midway between being fully released and fully depressed, then depressing the brake further would correspond to a command increasing the magnitude of the brake force, and lessening the brake depression would correspond to a command decreasing the magnitude of the brake force.

Thus, in contrast to claim 11, Nakamori fails to disclose or suggest controlling the motor to bring the motor torque of the motor to zero when the command increasing the magnitude of the brake force has been sensed. Since Nakamori only discloses a binary detection of the state of the brake as being either depressed or released, the brake sensor 22 is incapable of detecting whether the magnitude of the brake force has been increased or

decreased. In particular, since the magnitude of the brake force can be increased or decreased while the brake is ON, Nakamori is incapable of detecting that increase or decrease.

For similar reasons, Nakamori fails to disclose or suggest controlling the motor to output motor torque of the motor when a command decreasing the magnitude of the brake force has been sensed, as recited in claim 11.

Accordingly, for all of these reasons, claim 11 is patentably distinguishable from Nakamori. Claim 12 is also patentably distinguishable from Nakamori by virtue of its dependence from claim 11, as well as its additional recitations.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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